RoHS Compliant

Features

- 160 W convection cooled
- -20 to 50 deg C full load operation
- 3" x 5" x 1.5" (76.2 x 127 x 38.1 mm)
- No minimum load required
- 2 X MOPP Isolation
- 12 V fan & 5 V standby
- Inhibit function
- Conducted EMI EN 55022-B, FCC Part 15 Level B
- Safety approval to UL/CSA/EN/IEC60950-1
- RoHS Compliant

Applications: Diagnostic, Drug Pump, Dialysis, Home Health Care, Monitoring

ELECTRICAL SPECIFICATIONS

INPUT:

Input voltage range:	Universal Input	90 - 264 Vac
		120 – 390 Vdc
Input frequency range:		47-63 Hz
Input surge current:	230 Vac (cold start)	65 A max.
Safety ground leakage current:	230 Vac	300 µA max
Input current:	120 Vac @ 200 W 230 Vac @ 200 W	2.4 A 1.2 A

OUTPUT:

Voltage Adjustment	V1	± 3%
Transient Response	Main output 50 to 100% load change	< 10%, recovery time < 5 mS
Over Voltage Protection	V1	110 to 150% rated max
Over Current Protection	Rated output current	110% Typical
Short Circuit Protection	Automatic recovery	

ORDERING INFORMATION:

Product Family	Vout (Vdc)	Max Load Convection (1)	Max Load 300 LFM (1)	Minimum Load (A)	Ripple & Noise (3)	Connector	Total Regulation
MBC201-1005G	5.0	26.0 A	26 A	0	1%	JST	± 2.5%
MBC201-1005G-2	5.0	26.0 A	26 A	0	1%	JST	± 2.5%
MBC201-1T05G	5.0	26.0 A	35 A	0	1%	Screw Terminal	± 2.5%
MBC201-1T05G-2	5.0	26.0 A	35 A	0	1%	Screw Terminal	± 2.5%
MBC201-1012G	12	13.33 A	16.67 A	0	1%	JST	± 2.5%
MBC201-1012G-2	12	13.33 A	16.67 A	0	1%	JST	± 2.5%
MBC201-1T12G	12	13.33 A	16.67 A	0	1%	Screw Terminal	± 2.5%
MBC201-1T12G-2	12	13.33 A	16.67 A	0	1%	Screw Terminal	± 2.5%
MBC201-1015G	15	10.66 A	13.33 A	0	1%	JST	± 2.5%
MBC201-1015G-2	15	10.66 A	13.33 A	0	1%	JST	± 2.5%
MBC201-1T15G	15	10.66 A	13.33 A	0	1%	Screw Terminal	± 2.5%
MBC201-1T15G-2	15	10.66 A	13.33 A	0	1%	Screw Terminal	± 2.5%
MBC201-1024G	24	6.66 A	8.33 A	0	1%	JST	± 2.5%
MBC201-1024G-2	24	6.66 A	8.33 A	0	1%	JST	± 2.5%
MBC201-1T24G	24	6.66 A	8.33 A	0	1%	Screw Terminal	± 2.5%
MBC201-1T24G-2	24	6.66 A	8.33 A	0	1%	Screw Terminal	± 2.5%
MBC201-1030G	30	5.33 A	6.66 A	0	1%	JST	± 2.5%
MBC201-1030G-2	30	5.33 A	6.66 A	0	1%	JST	± 2.5%
MBC201-1T30G	30	5.33 A	6.66 A	0	1%	Screw Terminal	± 2.5%
MBC201-1T30G-2	30	5.33 A	6.66 A	0	1%	Screw Terminal	± 2.5%
MBC201-1048G	48	3.33 A	4.17 A	0	1%	JST	± 2.5%
MBC201-1048G-2	48	3.33 A	4.17 A	0	1%	JST	± 2.5%
MBC201-1T48G	48	3.33 A	4.17 A	0	1%	Screw Terminal	± 2.5%
MBC201-1T48G-2	48	3.33 A	4.17 A	0	1%	Screw Terminal	± 2.5%
Vfan (all models)	**12**	**0.5 A**	**0.5 A**	**0**			**± 20%**
V s/b (all models)	**5**	**1.0 A**	**1.0 A**	**0**			**± 5%**

Notes:

1. Combined power from main output Vfan and Vs/b should not exceed total power rating.
2. Fan output tolerance is ± 20%. When V1 full load, Vfan needs 20 mA load to be within regulation specification. Peak current for fan output is 1 A.
3. Ripple is 2% upt to 20 load and less than 1% above 20% load. Output nose measurement is made with a 20 MHz bandwidth using a 6" twisted pair, terminated with a 10 uF tantalum capacitor in parallel with a 0.1 uF ceramic capacitor.
4. For the -2 suffix (class 2 products) of MBC201-10XX-2, it indicates that the class 2 products have no Earthing tabs.
5. Specifications are for nominal input voltage, 25°C and max load unless otherwise stated.
6. Derate output power per chart below.
7. To enable output, power supply is shipped with J3 pin 4 and pin 6 shorted to enable main output.
8. Specifications subject to change without notice.
9. Warranty 2 years.

GENERAL SPECIFICATIONS:

Hold Up Time	120 Vac	10 mSec
	230 Vac	10 mSec
MTBF	>200 khrs	Bellcore TR-332
Switching Frequency	PFC converter variable 35 to 250 kHz, 90 kHz typical	Resonant converter : Variable 35 to 250 kHz, 90 kHz typical
Isolation Voltage	Min 4242 Vdc	Input to Output
Weight	325 g (0.72 lbs)	

ENVIRONMENTAL:

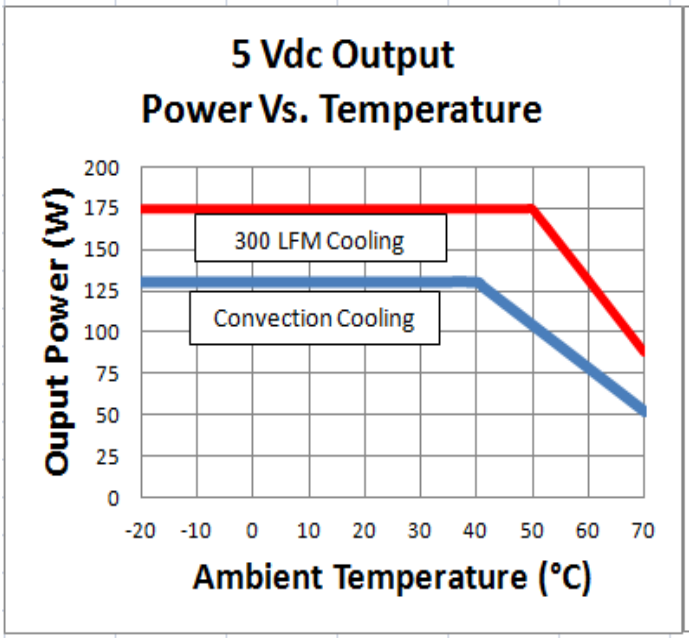
Operating Temperature	-20 to 70 C	See derating charts below
Altitude	Operating 10,000 ft.	Non-operation 40,000 ft.
Conducted emissions:	EN55022, FCC part 15 Level B	
Storage Temperature	-40 to +70 C	
Humidity	95%	Non Condensing
Radiated Emissions	EN55022, FCC part 15 Level B	To be controlled in end system
Electromagnetic Susceptibility	EN61000-4	2, 3, 4, 5 Level 3
Harmonic Current	EN61000-3-2, Class D	

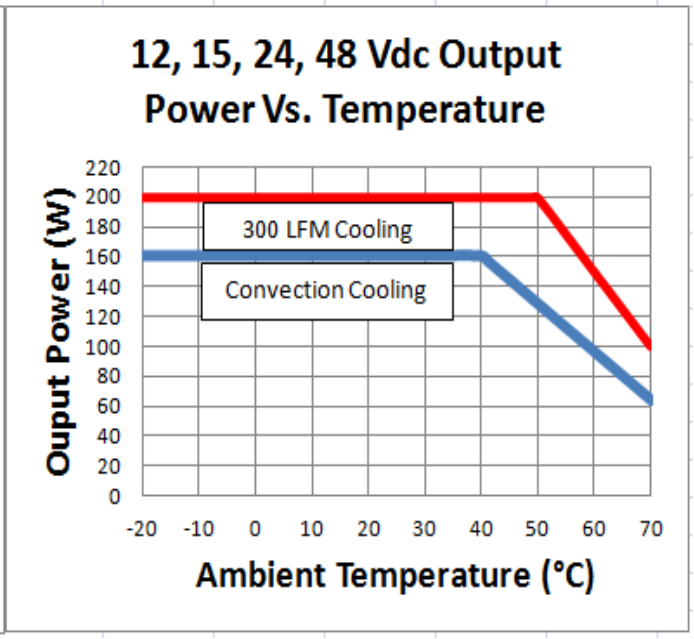
SIGNALS:

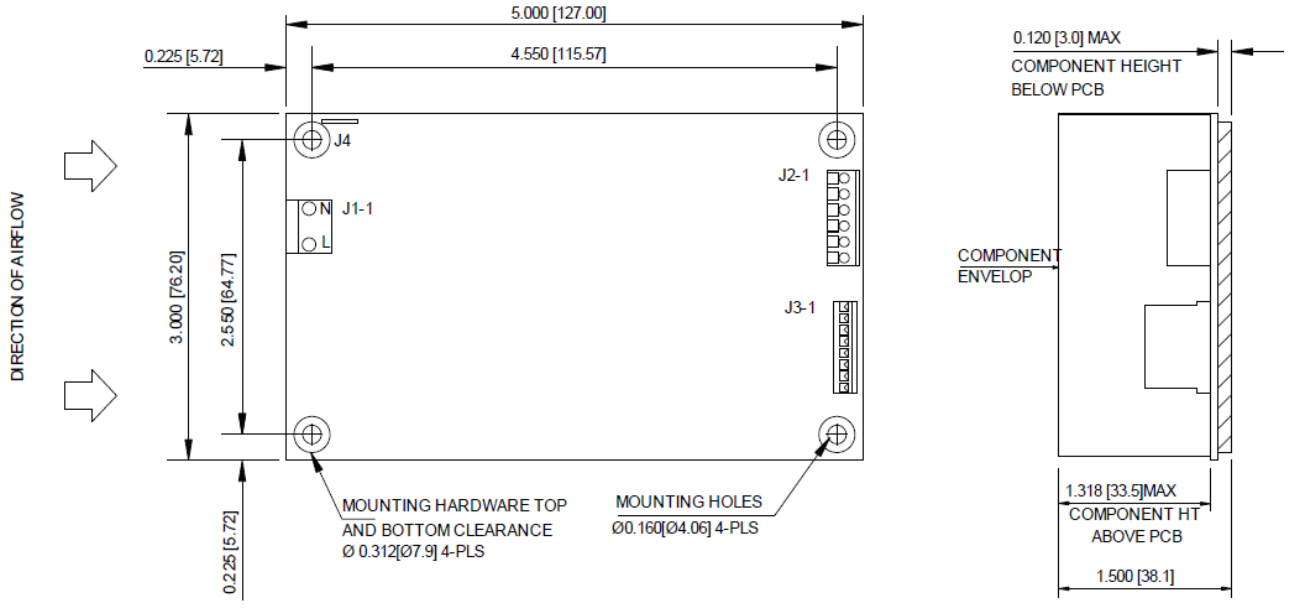
Power Good Signal	TTL signal goes high after main output is in regulation band. Delay is 0.1 to 0.3 sec.
Power Fail Signal	TTL signal goes low 1 msec advance before output goes out of regulation due to mains failure
Remote ON / OFF	To turn-on power supply short J4 pin 3 to J4 pin 6
Remote Sense	Compensates for 200 mV cable drop

SAFETY:

EN / UL / CSA: 60601-1 3rd edition	
Safety File Numbers	Pending







MECHANICAL OUTLINE DIMENSIONS
ALL DIMENSIONS ARE IN INCHES [MM]
GEN. TOLERANCE: +/-0.02 [+/-0.5]

MECHANICAL:

Input = J1	Ground	DC Output = J2		FAN= J3	
Pin 1: AC Neutral Pin 2: AC Line	Molex: 19705-4301	Pin 1 = RTN Pin 2 = RTN Pin 3 = RTN	Pin 4 = Vout Pin 5 = Vout Pin 6 = Vout	Pin 1 = + Remote Sense Pin 2 = Vfan (+12 V) Pin 3 = - Remote Sense Pin 4 = Inhibit	Pin 5 = Vs/b (5 Vdc) Pin 6 = Return (Signal) Pin 7 =Power Fail Pin 8 = Power Good
Mating Connector: Molex: 09-50-3031 Pins: 08-50-0106	Mating Connector: Molex: 190030001	Mating Connector: VHR-4M, Pins: SVH-41T-P1.1		Mating Connector: Molex: 22-01-2087, Pins: 08-50-0113	